

## NuGen - Bug #23798

### TGeoManager state should be restored after GENIEHelper is initialized

12/23/2019 11:52 AM - Kyle Knoepfel

<b>Status:</b>	New	<b>Start date:</b>	12/23/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Description</b>			
<p>Giuseppe Cerati and I have run into an awkward interaction between GENIE and larcorealg's GeometryCore class. During the GENIEHelper initialization step, a call is made to GENIE to "SetTopVolName", which also sets ROOT's TGeoManager's top volume. Whenever a call is then made to geo::GeometryCore::FindAllVolNames in the beginRun function of LArG4, ROOT's geometry manager is set to GENIE's top volume, instead of geo::GeometryCore's. This interaction between the two libraries effectively requires the user to run the GENIE and G4 steps in separate framework jobs.</p> <p>This should be fixed, presumably by having one (or both) of the classes that use ROOT's TGeoManager set the state back to what it was before it was adjusted.</p>			